Water Resources Division's Aquatic Invasive Species of the Week!

FOR THE WEEK OF:

January 6-12, 2014

Zebra and Quagga Mussels

Dreissena polymorpha & D. rostriformis bugensis

	Zebra Mussels	Quagga Mussels
Origin:	Black and Caspian Seas	Dneiper River drainage of Ukraine
Current Distribution:	First observed in 1988. In 1990, they were found in all of the Great Lakes. Today, they are still throughout the Great Lakes but now include many inland waters of Michigan.	First observed in 1989 in Lake Erie. Today they are found in all of the Great Lakes (limited in Lake Superior to an area near Duluth, MN). Fortune Pond in Iron Co., MI is the only known confirmed occurrence in inland waters of Michigan.
Means of Introduction:	Ballast water discharge	Ballast water discharge
Description:	• Sits flat on ventral side • Triangular in shape • Color patterns vary • Bilaterally symmetrical	• Will not sit flat on ventral side • Round shape • Lighter in color near hinge • Asymmetrical

Photo: Myriah Richerson, USGS

Photo: Myriah Richerson, USGS

Impacts: BOTH filter water at a high rate removing food sources such as plankton from the food web and other particles from the water column, which are then deposited on the lake bottom. The high filtration rates increase water clarity allowing more sunlight at greater depths resulting in increased aquatic plant growth. Recreational activities can be affected; as well as clogged utility and drinking water intake pipes. Zebra mussels have also been shown to attach to native mussels, disrupt feeding and other activities, and eventually smother the native mussel. Zebra mussels have also been linked to a proliferation of Type E Botulism leading to a surge in loon die-offs in recent years.

Photo: Zebra mussels covering a native mussel. IL Sea Grant.

Photo: Invasive mussel shells a foot deep at Bay City State Recreation Area in 2012.

Further information on aquatic invasive species can be found at the DEQ's website:

www.michigan.gov/aquaticinvasives.com